

**MAKHDUMNAGAR COAL BLOCK SUMMARY
PART A**

Sr. No.	Features	Details
1.	Location	
	Coal Block	MAKHDUMNAGAR
	Latitude	24° 0' 8" N-24° 2' 26" N (Provisional)
	Longitude	87° 36' 57" E-87° 42' 0" E (Provisional)
	Topo Sheet No.	Old- 72P/12 (R.F. 1:50000), New- G45V12
	Coalfield	Birbhum
	Villages	Makhdumnagar, Dhenupara, Shaikherdah, Balutipara, Dangapara, Baragachhia, Rasulpur, Shikhpur, Upar Keridera, Nama Gumra, Dhobanpur, Ralgarha, Ratgarha, Ullah and Nag Bataspur.
	Tehsil/Taluka	Sainthia
	District	Birbhum
	State	West Bengal
2.	Connectivity with Block	
	Nearest Rail Head	Mallarpur Railway Station (5 km from the Block)
	Road	The area lies immediate south of Panagarh-Moregram expressway (NH-60) that connects National Highway NH-2 and NH-34. The area can be approached either from Suri, district headquarter or Rampurhat, subdivisional town, Birbhum District, West Bengal. The interior parts of the area are well connected by unmetalled roads.
	Airport	Kazi Nazrul Islam Airport (Andal Airport).
3.	Area	
	Geological Block Area	23.35 Sq. Km.
	Green Cover	The block is free from Protected and Reserve forest.
	Area excluding green cover	23.35 Sq. Km
4.	Climate and Topography	
	Average Annual Rainfall	1430mm
	Temperature (Min. — Max.)	The Cold weather is from November to February and temperature drops to around 10°C. The summer months last from the middle of March to the middle of June and the temperature can shoot well above 40°C.

	Local Surface Drainage Channels	The terrain, located in the western upland of West Bengal is flat to low ground of rolling topography having general altitude between 50m and 60m above M.S.L. and is ornamented with red lateritic cappings (duricrust). Yellowish-white to white sandy claystone exposures (Khari khadan) of Tertiary Formation occur in the southwestern half of the area. The overall slope of the area is towards southeast with the main river Dwarka Nadi flowing from west to east. Small streamlets, fed by rainwater have formed a dendritic drainage pattern in the area.			
	Rivers	The main river Dwarka Nadi flowing from west to east.			
5.	Exploration				
	Status	Regionally Explored			
	Exploration Agency	GSI			
	Total Number of Boreholes with meterage	8 Boreholes; 5731.05m (Makhdumnagar Sector: BMK-1 to BMK-4 & Dhobbanpur Sector: BDB-1,2,4 & 6)			
	Borehole Density	0.34 Bhs per Sq.Km.			
	General Dip of Seams	A westerly dip of 1o to 1.5o.			
	General Strike Direction	NNW-SSE strike direction.			
	Faults	One major fault (F1-F1) has been identified with in the area.			
6.	Coal Seams & Reserve (As per GSI Report)				
	Coal Seams	Thickness Range (m)	Depth Range (m)	Resources (mt)	Grade
	Seam-IV	1.50		5.85	G
	Seam-III	1.30 – 3.80		86.08	D-G
	Seam-II	1.73- 14.78		229.82	C-G
	Seam-I	1.45-2.60		16.53	C-G
	Part of Dhobbanpur Sector			65.27	
	Total			403.55	
7.	Surface Constraints	Dwarka Nadi in the southern boundary.			
8.	Grade of coal	G9 (Provisional) based on weighted average grade as per grade-wise data available in Regional GR.			
9.	Decision Support System (DSS) Analysis	Hydrology info: The polygon is within 250 meters of major river(s)- Kulia N & Dwarka Nadi			
10.	Eco Sensitive Zone (ESZ)	Approx. 101 km from the boundary of ESZ of Udawa lake.			

Note:

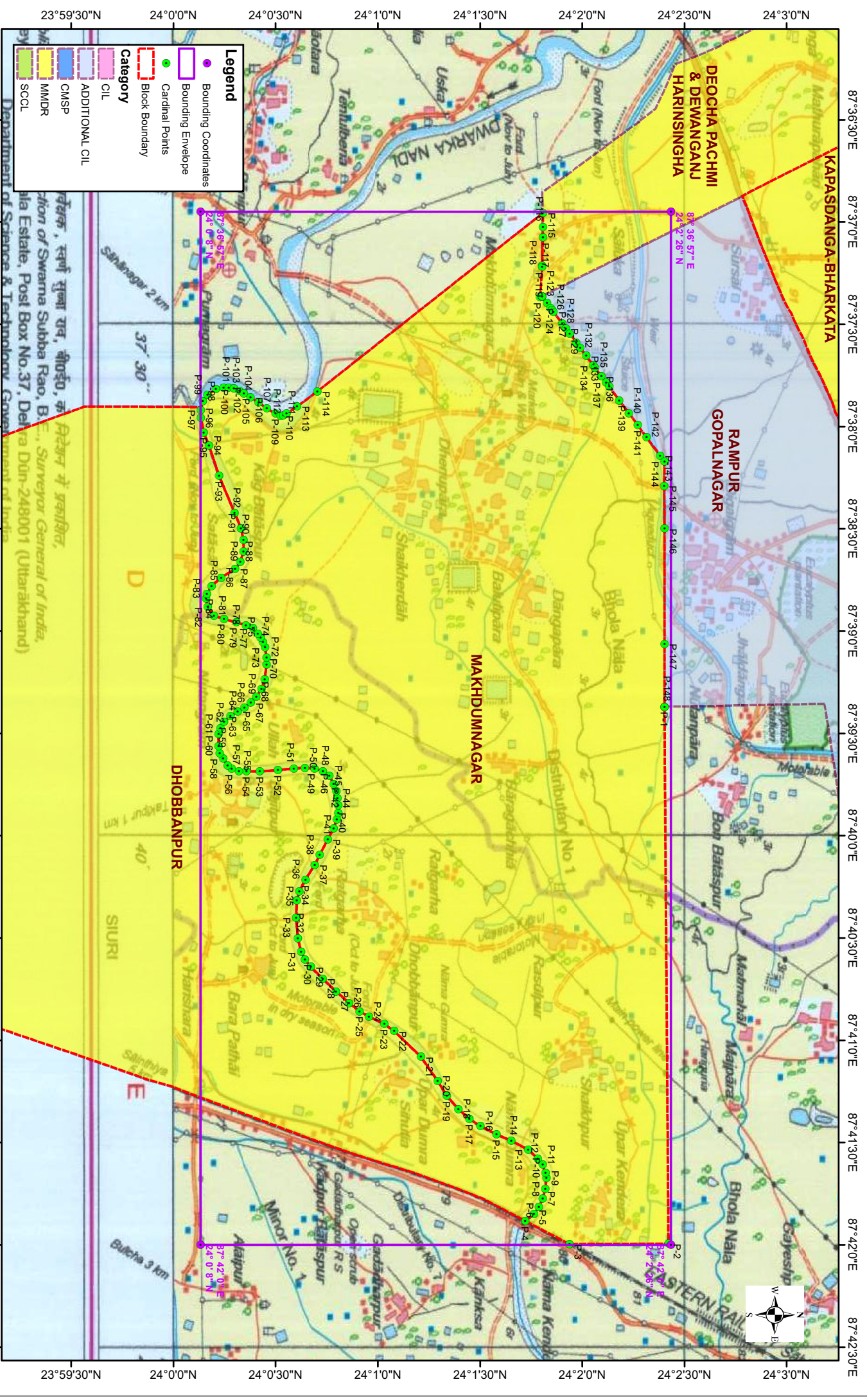
1. The summary has been compiled from “Final Report on Exploration for Coal by Scout Drilling around Makhdumnagar Area, Birbhum Coalfield, Birbhum District, West Bengal, 2009-10. & Final Report on Regional Exploration for Gondwana Coal under the Cover of Tertiary Sedimentary in Dhobbanpur Sector, Birbhum Coalfield, Birbhum District, West Bengal. 2010-12.
2. As per GSI Report the Block Area is 13.58 Sq.Km. and resources are 338.28MT. The area of Dhobbanpur sector falling in northern side of Dwarka River is merged with Makhdumpur Sector.
3. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate. Field DGPS survey is required to ascertain the exact area.

Disclaimer:

1. The analysis is done on Beta-version (Trial Version) of Decision Support System (DSS) of FSI / MOEF.
2. The Decision Rules for various parameters of this DSS System are controlled by FSI.
3. CMPDI only runs this DSS to obtain the status of any block based on these Decision Rules.
4. The database of the Decision Rules is updated by FSI from time to time.
5. CMPDI does not own any responsibility for variation in the results which are based on the Decision Rules of the FSI DSS in case of any updation of the database at FSI end.
6. ESZ analysis and tiger habitat/ corridor given here is based on the information available in public domain. Bidders are encouraged to verify this information and any other information additionally available.

Makhdumnagar Block, Birbhoom Coalfield

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Note: Data is in WGS84 coordinate system.



Provisional Cardinal Points for MAKHDUMNAGAR Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-1	87° 39' 22.148" E	24° 2' 24.106" N
P-2	87° 41' 59.669" E	24° 2' 25.277" N
P-3	87° 41' 59.795" E	24° 1' 56.203" N
P-4	87° 41' 52.976" E	24° 1' 43.252" N
P-5	87° 41' 50.920" E	24° 1' 45.788" N
P-6	87° 41' 48.795" E	24° 1' 47.296" N
P-7	87° 41' 46.465" E	24° 1' 48.392" N
P-8	87° 41' 43.656" E	24° 1' 49.146" N
P-9	87° 41' 40.503" E	24° 1' 49.488" N
P-10	87° 41' 38.927" E	24° 1' 49.214" N
P-11	87° 41' 36.460" E	24° 1' 48.323" N
P-12	87° 41' 34.679" E	24° 1' 46.953" N
P-13	87° 41' 32.074" E	24° 1' 44.075" N
P-14	87° 41' 29.470" E	24° 1' 39.126" N
P-15	87° 41' 27.552" E	24° 1' 34.823" N
P-16	87° 41' 25.153" E	24° 1' 30.095" N
P-17	87° 41' 23.097" E	24° 1' 26.874" N
P-18	87° 41' 20.151" E	24° 1' 23.585" N
P-19	87° 41' 16.287" E	24° 1' 20.195" N
P-20	87° 41' 11.970" E	24° 1' 17.573" N
P-21	87° 41' 4.775" E	24° 1' 12.588" N
P-22	87° 40' 57.322" E	24° 1' 4.776" N
P-23	87° 40' 55.163" E	24° 1' 1.846" N
P-24	87° 40' 53.056" E	24° 0' 57.323" N
P-25	87° 40' 51.514" E	24° 0' 54.599" N
P-26	87° 40' 48.996" E	24° 0' 51.515" N
P-27	87° 40' 45.655" E	24° 0' 47.712" N
P-28	87° 40' 41.955" E	24° 0' 43.806" N
P-29	87° 40' 38.460" E	24° 0' 40.362" N
P-30	87° 40' 36.250" E	24° 0' 38.563" N
P-31	87° 40' 34.091" E	24° 0' 37.484" N
P-32	87° 40' 30.082" E	24° 0' 36.508" N
P-33	87° 40' 24.017" E	24° 0' 35.994" N
P-34	87° 40' 18.929" E	24° 0' 36.199" N
P-35	87° 40' 16.256" E	24° 0' 36.970" N
P-36	87° 40' 12.813" E	24° 0' 38.718" N
P-37	87° 40' 8.547" E	24° 0' 41.493" N
P-38	87° 40' 5.617" E	24° 0' 42.932" N
P-39	87° 40' 1.094" E	24° 0' 45.296" N
P-40	87° 39' 57.805" E	24° 0' 46.992" N
P-41	87° 39' 55.235" E	24° 0' 47.969" N
P-42	87° 39' 53.385" E	24° 0' 48.380" N
P-43	87° 39' 51.072" E	24° 0' 48.380" N
P-44	87° 39' 49.068" E	24° 0' 48.175" N
P-45	87° 39' 46.909" E	24° 0' 47.763" N
P-46	87° 39' 44.750" E	24° 0' 47.044" N
P-47	87° 39' 42.489" E	24° 0' 45.759" N

Provisional Cardinal Points for MAKHDUMNAGAR Block

P-48	87° 39' 40.993" E	24° 0' 43.893" N
P-49	87° 39' 40.274" E	24° 0' 41.374" N
P-50	87° 39' 40.068" E	24° 0' 38.547" N
P-51	87° 39' 40.274" E	24° 0' 35.309" N
P-52	87° 39' 40.736" E	24° 0' 30.684" N
P-53	87° 39' 41.147" E	24° 0' 25.390" N
P-54	87° 39' 41.147" E	24° 0' 21.432" N
P-55	87° 39' 41.045" E	24° 0' 19.222" N
P-56	87° 39' 40.325" E	24° 0' 17.115" N
P-57	87° 39' 39.348" E	24° 0' 15.933" N
P-58	87° 39' 37.395" E	24° 0' 14.597" N
P-59	87° 39' 35.751" E	24° 0' 13.620" N
P-60	87° 39' 33.695" E	24° 0' 13.209" N
P-61	87° 39' 30.200" E	24° 0' 13.209" N
P-62	87° 39' 28.452" E	24° 0' 13.826" N
P-63	87° 39' 26.551" E	24° 0' 14.854" N
P-64	87° 39' 24.906" E	24° 0' 16.755" N
P-65	87° 39' 23.570" E	24° 0' 18.863" N
P-66	87° 39' 22.439" E	24° 0' 20.816" N
P-67	87° 39' 21.000" E	24° 0' 22.717" N
P-68	87° 39' 19.201" E	24° 0' 24.362" N
P-69	87° 39' 16.940" E	24° 0' 25.852" N
P-70	87° 39' 14.113" E	24° 0' 26.778" N
P-71	87° 39' 9.796" E	24° 0' 27.309" N
P-72	87° 39' 7.654" E	24° 0' 27.309" N
P-73	87° 39' 4.742" E	24° 0' 26.880" N
P-74	87° 39' 3.200" E	24° 0' 26.281" N
P-75	87° 39' 1.829" E	24° 0' 25.596" N
P-76	87° 39' 0.716" E	24° 0' 24.739" N
P-77	87° 38' 59.174" E	24° 0' 23.283" N
P-78	87° 38' 58.231" E	24° 0' 21.227" N
P-79	87° 38' 57.460" E	24° 0' 18.486" N
P-80	87° 38' 56.433" E	24° 0' 14.888" N
P-81	87° 38' 55.490" E	24° 0' 11.890" N
P-82	87° 38' 52.920" E	24° 0' 10.091" N
P-83	87° 38' 50.351" E	24° 0' 9.577" N
P-84	87° 38' 48.980" E	24° 0' 9.834" N
P-85	87° 38' 46.753" E	24° 0' 11.205" N
P-86	87° 38' 44.269" E	24° 0' 14.031" N
P-87	87° 38' 41.699" E	24° 0' 18.143" N
P-88	87° 38' 39.643" E	24° 0' 19.685" N
P-89	87° 38' 36.559" E	24° 0' 20.542" N
P-90	87° 38' 33.218" E	24° 0' 20.542" N
P-91	87° 38' 29.878" E	24° 0' 19.856" N
P-92	87° 38' 25.338" E	24° 0' 17.972" N
P-93	87° 38' 14.459" E	24° 0' 13.432" N
P-94	87° 38' 5.550" E	24° 0' 10.434" N
P-95	87° 38' 1.695" E	24° 0' 8.892" N

Provisional Cardinal Points for MAKHDUMNAGAR Block

P-96	87° 37' 57.498" E	24° 0' 8.035" N
P-97	87° 37' 55.100" E	24° 0' 8.035" N
P-98	87° 37' 52.615" E	24° 0' 8.635" N
P-99	87° 37' 50.645" E	24° 0' 10.005" N
P-100	87° 37' 49.018" E	24° 0' 12.489" N
P-101	87° 37' 48.504" E	24° 0' 14.717" N
P-102	87° 37' 48.504" E	24° 0' 16.259" N
P-103	87° 37' 48.761" E	24° 0' 17.800" N
P-104	87° 37' 49.532" E	24° 0' 19.428" N
P-105	87° 37' 50.217" E	24° 0' 20.627" N
P-106	87° 37' 51.416" E	24° 0' 22.597" N
P-107	87° 37' 52.958" E	24° 0' 24.996" N
P-108	87° 37' 54.671" E	24° 0' 27.394" N
P-109	87° 37' 56.213" E	24° 0' 29.964" N
P-110	87° 37' 56.813" E	24° 0' 31.506" N
P-111	87° 37' 56.641" E	24° 0' 32.277" N
P-112	87° 37' 56.213" E	24° 0' 33.219" N
P-113	87° 37' 54.072" E	24° 0' 36.303" N
P-114	87° 37' 49.674" E	24° 0' 42.248" N
P-115	87° 36' 57.329" E	24° 1' 48.412" N
P-116	87° 37' 1.438" E	24° 1' 48.437" N
P-117	87° 37' 4.484" E	24° 1' 48.456" N
P-118	87° 37' 12.644" E	24° 1' 48.230" N
P-119	87° 37' 13.153" E	24° 1' 48.216" N
P-120	87° 37' 22.059" E	24° 1' 47.596" N
P-121	87° 37' 21.762" E	24° 1' 48.146" N
P-122	87° 37' 21.751" E	24° 1' 48.168" N
P-123	87° 37' 21.758" E	24° 1' 48.168" N
P-124	87° 37' 23.790" E	24° 1' 49.677" N
P-125	87° 37' 25.134" E	24° 1' 50.675" N
P-126	87° 37' 25.719" E	24° 1' 51.109" N
P-127	87° 37' 26.327" E	24° 1' 51.560" N
P-128	87° 37' 29.709" E	24° 1' 54.071" N
P-129	87° 37' 31.197" E	24° 1' 55.177" N
P-130	87° 37' 32.760" E	24° 1' 56.337" N
P-131	87° 37' 35.261" E	24° 1' 58.194" N
P-132	87° 37' 36.881" E	24° 1' 59.397" N
P-133	87° 37' 39.251" E	24° 2' 1.157" N
P-134	87° 37' 42.016" E	24° 2' 3.209" N
P-135	87° 37' 42.752" E	24° 2' 3.756" N
P-136	87° 37' 45.256" E	24° 2' 5.615" N
P-137	87° 37' 47.058" E	24° 2' 6.954" N
P-138	87° 37' 48.288" E	24° 2' 7.867" N
P-139	87° 37' 52.261" E	24° 2' 10.816" N
P-140	87° 37' 56.062" E	24° 2' 13.639" N
P-141	87° 37' 59.548" E	24° 2' 16.227" N
P-142	87° 38' 3.086" E	24° 2' 18.854" N
P-143	87° 38' 8.435" E	24° 2' 22.819" N

Provisional Cardinal Points for MAKHDUMNAGAR Block

P-144	87° 38' 10.164" E	24° 2' 24.110" N
P-145	87° 38' 17.380" E	24° 2' 24.041" N
P-146	87° 38' 29.850" E	24° 2' 24.106" N
P-147	87° 39' 3.793" E	24° 2' 24.079" N

Note: The provisional cardinal points are in WGS84 coordinate system. These points are extracted through ArcGIS software after georeferencing of block boundary and onground DGPS survey is required to ascertain the exact location of the points.